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EXAMINER	
TRAN, TUNG Q	

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/771,268	LIAO ET AL.	
	Examiner	Art Unit	
	TUNG Q. TRAN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5 and 7-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5 and 7-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Petition for review, filed May 5 2008, with respect to Final Action dated January 2 2008 have been fully considered and are persuasive. The Final Action dated January 2 2008 has been withdrawn.

2. This instant Action replaces the Final Action dated January 2 2008.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "said tag" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 11, "flow context" is recited more than two times in the claim. It is unclear which "flow context" is recited in last line.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (US 6,678,474) in view of Akahane et al. (US 2006/0126644).

Masuda discloses lightwave network data communication system comprising the following features.

Regarding claim 1, a method of packet grooming and aggregation within an Ethernet over SONET/SDH system (EOS system) (see Abstract; Fig. 1; and see Sonet/SDH recited in col. 2, line 18-28; col. 5, line 26-35; col. 6, line 40-47; col. 7 line 66 to col. 8 line 5; col. 16, line 58-63; Ethernet recited in col. 10, line 11-15), said method comprising: receiving data packets each tagged according to flow labels (Fig. 1, Router 11, Router 12 and 13 receive IP packets from users; see user IP packets processed by

encapsulating recited in col. 7, line 50-65; Fig. 5-6); multiplexing a number of data streams according to respective tags, port or channel IDs of said data packets (see aggregating data flows according to respective labels and quality of service recited in Fig. 3-4; col. 7, line 2-32); and mapping each said data stream directly to a physical transport interface by tag modification independent of any Layer 2 bridging or Layer 3 routing protocol (see mapping aggregated flows to destinations based on labels recited in Fig. 8-9; col. 9, line 28-67).

Regarding claim 2, said multiplexing and mapping step independent of any given physical Ethernet port or SONET/SDH virtual concatenation groups (VCG) transport pipes so as to allow flexible multiplexing and mapping of said number of data streams among said physical Ethernet ports and SONET/SDH VCG transport pipes and to guarantee quality of service levels of flow of said number of data streams (see aggregating data flows according to respective labels and quality of service recited in Fig. 3-4; col. 7, line 2-32; and see mapping aggregated flows to destinations based on labels recited in Fig. 8-9; col. 9, line 28-67).

Masuda discloses the claim limitations above. Masuda does not disclose the following features: regarding claim 1, data packets each tagged according to encapsulation scheme and including a port or channel ID

Akahane discloses VPN router and VPN identification method by using logical channel identifiers comprising the following features.

Regarding claim 1, data packets each tagged according to encapsulation scheme and including a port or channel ID (see data packets tagged according to how they are encapsulated and see channel identifiers recited [0011]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Masuda by using features, as taught by Akahane, in order to provide a VPN edge router with the ability of identifying VPNs by using the identifiers of logical channels multiplexed on a single input line (Akahane: the Abstract).

7. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemieux et al. (US 2004/0017796) in view of Akahane et al. (US 2006/0126644).

Lemieux discloses method and system for multi-protocol label switching (MPLS) based data flow aggregation in a third generation (3G) cellular telecommunication system comprising the following features.

Regarding claim 1, a method of packet grooming and aggregation within an Ethernet over SONET/SDH system (EOS system) (see Abstract, [0032]), said method comprising: receiving data packets (see receiving data flows recited in [0015] and [0019]); multiplexing a number of data streams according to respective tags, port or channel IDs of said data packets (see aggregating flows according to specific criterion quality of service using MPLS recited in [0016], [0019], [0033], Fig. 3B, 4-6); and mapping each said data stream directly to a physical transport interface by tag modification independent of any Layer 2 bridging or Layer 3 routing protocol (see mapping data flows to destinations based on labels using MPLS recited in [0010], Fig. 7).

Regarding claim 2, said multiplexing and mapping step independent of any given physical Ethernet port or SONET/SDH virtual concatenation groups (VCG) transport pipes so as to allow flexible multiplexing and mapping of said number of data streams among said physical Ethernet ports and SONET/SDH VCG transport pipes and to guarantee quality of service levels of flow of said number of data streams (see aggregating flows according to specific criterion quality of service using MPLS recited in [0016], [0019], [0033], Fig. 3B, 4-6; and see mapping data flows to destinations based on labels using MPLS recited in [0010], Fig. 7).

Lemieux discloses the claim limitations above. Masuda does not disclose the following features: regarding claim 1, data packets each tagged according to encapsulation scheme and including a port or channel ID

Akahane discloses VPN router and VPN identification method by using logical channel identifiers comprising the following features.

Regarding claim 1, data packets each tagged according to encapsulation scheme and including a port or channel ID (see data packets tagged according to how they are encapsulated and see channel identifiers recited [0011]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Lemieux by using features, as taught by Akahane, in order to provide a VPN edge router with the ability of identifying VPNs by using the identifiers of logical channels multiplexed on a single input line (Akahane: the Abstract).

8. Claims 4-5, 7-8, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al. (US 6,222,848) in view of Narvaez (US 2004/0258062) and further in view of Hofmeister et al. (US 2004/0156313).

Hayward discloses a method and apparatus for routing data packets via SONET (see Abstract) comprising the following features.

Regarding claim 4, an Aggregation/Grooming Engine (AGE) for use within an Ethernet over SONET/SDH system (EOS system) (see Abstract), said AGE comprising: an ingress portion having an ingress header unit (Fig. 3, Ethernet receiver 218), for receiving data from an Ethernet MAC subsystem (see "receives Ethernet data packets" recited in col. 5, line 66 continues to col. 6, line 3); an ingress lookup engine (Fig. 3, packet distributor 214) including a corresponding ingress flow database (Fig. 3, associated table 240) and coupled to said ingress header unit (Fig. 3, packet distributor 214); an ingress tag editor (Fig. 3, SONET transmitter 230) coupled to said ingress lookup engine (Fig. 3, packet distributor 214); and an ingress flow buffer unit (Fig. 3, buffer 248, queues 222A-222N) coupled to said ingress tag editor (Fig. 3, SONET transmitter 230) and an encapsulation engine (Fig. 3, SONET transport node channel add/drop 258); and an egress portion having an egress header unit (Fig. 3, SONET packet receiver 210) for receiving data from said encapsulation engine (Fig. 3, SONET transport node channel add/drop 242); an egress lookup engine (Fig. 3, packet distributor 214) including a corresponding egress flow database (Fig. 3, associated table 240) and coupled to said egress header unit (Fig. 3, SONET packet receiver 210); an egress tag editor (Fig. 3, SONET packet receiver 210) coupled to said egress lookup

engine (Fig. 3, packet distributor 214); and an egress flow buffer unit (Fig. 3, queues 224A-224N) coupled to said egress tag editor (Fig. 3, SONET packet receiver 210) and said Ethernet MAC subsystem (Fig. 3, output path 220); wherein said ingress portion and said egress portion of said AGE (Fig. 3, transport node 200) provide grooming and aggregation functionality for said EOS system (see routing data recited in the Abstract) including label lookup (see looking up entry recited in col. 7, lines 50-60), flow buffering (see "queuing" recited in col. 2, lines 3-8), label editing (see "removed" and "appended" recited in col. 6, lines 47-49), and flow scheduling (see "scheduler" recited in col. 6, lines 18-22).

Regarding claim 5, wherein said ingress flow buffer unit and said egress flow buffer unit are multi-channel buffers (Fig. 3, queues 222A-222N and queues 224A-224N) where each buffers respective data flow for one service flow (Fig. 3).

Regarding claim 7, wherein said ingress portion and said egress portion form symmetric ingress and egress paths (Fig. 3).

Regarding claim 8, wherein said ingress lookup engine and said egress lookup engine are integrated into a single bi-directional lookup engine (Fig. 3, packet distributor 214) having a corresponding bi-directional flow database that integrates said ingress flow database and said egress flow database (Fig. 3, associated table 240).

Hayward discloses the claim limitation above. Hayward does not disclose the following features: regarding claims 4 and 5, although Hayward discloses ingress and egress flow buffers (see paragraph above), Hayward does not disclose ingress and egress flow FIFOs; extracting 2-tuple ingress search keys including a port or channel ID

and an ingress frame tag, wherein said ingress frame tag is according to an ingress frame tag encapsulation scheme; extracting 2-tuple ingress search keys including a virtual concatenation group ID and an egress frame tag, wherein said egress frame tag is according to an egress frame tag encapsulation scheme; regarding claim 14, wherein said ingress frame tag is an 802.1Q tag, a MPLS tag, or a proprietary tag; regarding claim 15, wherein said egress frame tag is an 802.1Q tag, a MPLS tag, a proprietary tag, or a GFP tag.

Narvaez discloses method and device for the classification and redirection of data packets in a heterogeneous network comprising the following features.

Regarding claim 4, wherein FIFO is disclosed (see "FIFO" recited in para. [0052]); extracting 2-tuple ingress search keys including a port or channel ID and an ingress frame tag (see extracting port and flow ID and tag recited in [0054] and Claim 1).

Regarding claim 4, wherein FIFO is disclosed (see "FIFO" recited in para. [0052]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hayward by using features, as taught by Narvaez, in order to provide a system and method for classification of data units in a network device that acts to bridge heterogeneous networks, providing many different services and provisions many different transport mechanisms (Narvaez: [0013]).

Hayward and Narvaez disclose the claimed limitations above. They do not disclose the following features: regarding claim 4, wherein said ingress frame tag is

according to an ingress frame tag encapsulation scheme; extracting 2-tuple ingress search keys including a virtual concatenation group ID, wherein said egress frame tag is according to an egress frame tag encapsulation scheme; regarding claim 14, wherein said ingress frame tag is an 802.1Q tag, a MPLS tag, or a proprietary tag; regarding claim 15, wherein said egress frame tag is an 802.1Q tag, a MPLS tag, a proprietary tag, or a GFP tag.

Hofmeister discloses method and apparatus for performing data flow ingress/egress admission control in a provider network comprising the following features.

Regarding claim 4, wherein said ingress frame tag is according to an ingress frame tag encapsulation scheme (see encapsulation label recited in [0077], [0079], [0105], [0150]); extracting 2-tuple ingress search keys including a virtual concatenation group ID (see searching keys include virtual concatenation group ID recited in [0073-0074], [0327-0328]); wherein said egress frame tag is according to an egress frame tag encapsulation scheme (see encapsulation label recited in [0077], [0079], [0105], [0150]).

Regarding claim 14, wherein said ingress frame tag is an 802.1Q tag, a MPLS tag, or a proprietary tag (see MPLS recited in the Abstract, [0005-0006], [0009-0010], [0014], [0016], [0072], [0071-0082], [0088], [0090-0091], [0093-0096], [0101-0104], [0122]).

Regarding claim 15, wherein said egress frame tag is an 802.1Q tag, a MPLS tag, a proprietary tag, or a GFP tag (see MPLS recited in the Abstract, [0005-0006],

[0009-0010], [0014], [0016], [0072], [0071-0082], [0088], [0090-0091], [0093-0096], [0101-0104],[0122]; see GFP recited in [0015-0016], [0117], [0123-0124], [0354]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hayward and Narvaez by using features, as taught by Hofmeister, in order to manage the data flows into a provider network and exiting from a provider network to customer equipment (Hofmeister: the Abstract).

9. Claim 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al. (US 6,222,848) in view of Buskirk et al. (US 2002/0191543) and further in view of Hofmeister et al. (US 2004/0156313).

Hayward discloses a method and apparatus for routing data packets via SONET (see Abstract) comprising the following features.

Regarding claim 9, a method of packet grooming and aggregation within an Ethernet over SONET/SDH system (EOS system) (see Abstract), said method comprising: receiving a data packet (see “receives Ethernet data packets” recited in col. 5, line 66 continues to col. 6, line 3; and “receiving SONET payloads” recited in col. 1, line 64 and col. 2, lines 11); providing an input client frame (see “encapsulated data packets” recited in col. 6, lines 1-9) from said data packet to a header unit (see “packet distributor 214” recited in col. 6, lines 7-9); extracting a search key (see “destination MAC address” recited in col. 7, lines 43-44) from said input client frame (see “ethernet data packet” recited in col. 7, lines 43-44) via said header unit (see “packet distributor 214” recited in col. 6, lines 7-9); correlating (see “refers to table 240” recited in col. 7, lines 50-53) said search key via a lookup engine (Fig. 3, packet distributor 214) to a

match (see "matching" recited in col. 7, lines 50-54) in a flow database (Fig. 3, associated table 240) to determine flow context (see "identifier" and "source MAC address" recited in col. 7, lines 54-57); modifying said input client frame (see "overhead information appended" recited in col. 6, lines 47-51) via a tag editor (Fig. 3, SONET transmitter 230) according to said flow context (see "identifier" and "source MAC address" recited in col. 7, lines 54-57); buffering said input client frame via a flow buffer (Fig 3, buffers 246-252, queues 222A-222N, queues 224A-224N, and queues 226A-226N); applying appropriate discard policies to said flow buffer (see how to discard data packet recited in col. 8, lines 57-65); and scheduling said input client frame via a scheduler of the flow buffer (Fig. 3, schedulers 228, 232, 236) for transmission into output channels (Fig. 3, optical fibres 206, 208, output path 220) according to output channel status (see "STS channel" recited in col. 8, lines 42-47).

Regarding claim 12, wherein said correlating step (see "refers to table 240" recited in col. 7, lines 50-53) occurs in accordance with a combined ingress table and egress table in a bi-directional lookup manner (Fig. 3, associated table 240).

Hayward disclosed the claimed limitations above. Hayward does not disclose the following features: regarding claim 9, although Hayward discloses a flow buffer (see paragraph above), Hayward does not disclose a flow FIFO and scheduling said input client frame via a scheduler of the flow FIFO for transmission into output channels according flow quality of service parameters; packet tagged according to an encapsulation scheme and including a port or channel ID; search key including said port or channel ID and said tag; discard policies based on flow context.

Buskirk discloses systems and methods for policing multiple data flows and multi-protocol data flows (see the Title) comprising the following features.

Regarding claim 9, wherein FIFO is disclosed (see "FIFO" recited in para. [0047], page 4); and scheduling said input client frame via a scheduler of the flow FIFO for transmission into output channels according flow quality of service parameters (see "data flow is monitored for conformance with a particular quality of service" recited in para. [0010], page 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hayward by using features, as taught by Buskirk, in order to output or input data in the order of arriving time and make the most efficient use of the communication network for different services.

Hayward and Buskirk disclosed the claimed limitations above. They do not disclose the following features: regarding claim 9, packet tagged according to an encapsulation scheme and including a port or channel ID; search key including said port or channel ID and said tag; discard policies based on flow context.

Hofmeister discloses method and apparatus for performing data flow ingress/egress admission control in a provider network comprising the following features.

Regarding claim 9, packet tagged according to an encapsulation scheme and including a port or channel ID (see encapsulation label recited in [0077], [0079], [0105], [0150]); search key including said port or channel ID and said tag (see encapsulation

label identifies data flow recited in [0150]); discard policies based on flow context (see dropping packets recited in [0165], [0167]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hayward and Buskirk by using features, as taught by Hofmeister, in order to manage the data flows into a provider network and exiting from a provider network to customer equipment (Hofmeister: the Abstract).

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al. (US 6,222,848) in view of Buskirk et al. (US 2002/0191543) and further in view of Hofmeister et al. (US 2004/0156313) and Katzman et al. (US 2004/0034759).

Hayward, Buskirk, and Hofmeister disclosed the claimed limitations above. They do not disclose the following features: regarding claim 10, wherein said scheduling step occurs in accordance with said flow context.

Katzman discloses multi-threaded pipeline with context issue rules comprising the following features.

Regarding claim 10, wherein said scheduling step occurs in accordance with said flow context (see [0023]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hayward, Buskirk, and Hofmeister by using features, as taught by Katzman, in order to increase throughput in a processor having a mutli-thread pipeline (Katzman: the Abstract).

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al. (US 6,222,848) in view of Buskirk et al. (US 2002/0191543) and further in view of

Hofmeister et al. (US 2004/0156313), Katzman et al. (US 2004/0034759), and Narvaez (US 2004/0258062).

Hayward, Buskirk, Hofmeister, and Katzman disclosed the claimed limitations above. Hofmeister also discloses the following features.

Regarding claim 11, receiving said search key (see extracting encapsulation label recited in [0146], [0150]; and see searching key recited in [0155-0157], [0173-0175], [0186-0187], [0315-317], [0327-330], [0340-341]; outputting said flow context (Fig. 4; [0118-0119], [0163]).

Katzman also discloses the following features.

Regarding claim 11, fetching flow context from said flow database (see fetching recited in [0010], [0054], and [0064]).

They do not disclose the following features: regarding claim 11, performing a wildcard linear search against predetermined search key fields of said flow database.

Narvaez discloses method and device for the classification and redirection of data packets in a heterogeneous network comprising the following features.

Regarding claim 10, performing a wildcard linear search against predetermined search key fields of said flow database (see tag extraction mask recited in [0053-0054]), fetching flow context from said flow database (see fetching tag recited in [0054]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hayward, Buskirk, Hofmeister, and Katzman by using features, as taught by Narvaez, in order to provide a system and method for classification of data units in a network device that acts to bridge heterogeneous

networks, providing many different services and provisions many different transport mechanisms (Narvaez: [0013]).

Allowable Subject Matter

12. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUNG Q. TRAN whose telephone number is (571)272-

9737. The examiner can normally be reached on Mon-Fri: 7:30 am - 5 pm, off alternative Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. Q. T./
Examiner, Art Unit 2616

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2616